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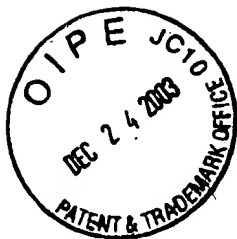
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Serial No.: 09/964,143

) Art Unit 1617

Applicants: JAMES HUGH McLAUGHLIN

) Examiner:

Filed: September 25, 2001

) Shengjun Wang

For: EMOLLIENT SKIN CONDITIONING CREAM AND METHOD)

Assistant Commissioner of Patents
U.S. Patent and Trademark Office
Washington, D.C. 20231

Affidavit Under 37 CFR 1.132

STATE OF CONNECTICUT)

)

SS: Woodstock

COUNTY OF WINDHAM)


)

JAMES HUGH McLAUGHLIN, being of full age and duly sworn according to
law, deposes and says:

1. I am employed by Crabtree & Evelyn, Ltd., at 102 Peake Brook Road, P.O. 167,
Woodstock, as a Creative New Product Developer. I am the inventor of the invention
described and claimed in the above-identified patent application.
2. I received a Bachelor of Science Degree in Chemistry from Fairleigh Dickinson University,
Rutherford, New Jersey, in 1964.
3. My work experience follows:
 - a. 1952 – 1968 - Unilever Company; Edgewater, New Jersey. Technician in the Perfume
Department and as a Technician, Chemist and Section Manager in the New Product
Development Group in Research & Development Department..
 - b. 1969 – 1983 - Center For New Product Development, New York, New York. Chief
Chemist and principal.


- c. 1983 – 1998 – James H. McLaughlin New Products, Inc., *Brooklyn*, Connecticut.
Chief Chemist and Owner.
 - d. 1999 – to date – Crabtree & Evelyn, Ltd., Woodstock, Connecticut. Director of Creative
New Product Development and Chief Chemist.
4. I noted that U.S. Patent 6,042,815 (Kellner et al.), the primary reference against the invention set forth in the subject application, teaches at column 2, lines 25 – 63, “Examples of gelling agents which may be used...are sodium, potassium, aluminum, magnesium, or calcium salts of stearic...acids....Preferably...sodium stearate.” Following those teachings, I performed the following experiments:
- a. In accordance with procedure set forth in Example 1 of Kellner et al., I heated 950 grams of water to 185°F. in a beaker and added 50 grams of sodium stearate powder with propeller agitation. The agitation was continued for five minutes and, thereafter the mixture was cooled to 75°F. The resultant composition was a solid.
 - b. I repeated the experiment outlined in a above using 900 grams of water and 100 grams of sodium stearate powder and again a solid composition was obtained upon the cooling the mixture from 185°F. to 75°F.
 - c. I repeated the experiment outlined in a above using 950 grams of water and 50 grams of calcium stearate powder with the result that the calcium stearate powder formed an upper layer on the water when agitation was discontinued.
 - d. I repeated the experiment outlined in a above using 900 grams of water and 100 grams of calcium stearate powder and again the calcium stearate particles formed an upper layer on the water when the agitation was discontinued.
5. Based upon the foregoing experiments, I concluded that sodium stearate and calcium

stearate are not equivalents as gelling agents for water as alleged by Kellner et al. This conclusion is in accord with the facts set forth at pages 532 and 801 of The Condensed Chemical Dictionary, Ninth Edition and page 3-227 of the CRC Handbook of Chemistry and Physics, 81st Edition, said pages being appended to this Affidavit. Page 801 of The Condensed Chemical Dictionary states that sodium stearate is water soluble whereas pages 3-1 and 3-227 of CRC Handbook of Chemistry and Physics states that calcium stearate is water-insoluble and has a melting point of 179.5°C. Further, page 532 of the The Condensed Chemical Dictionary states that magnesium stearate has a melting point of 88.5°C. and is water-insoluble and page 3-227 of the CRC Handbook of Chemistry and Physics states that aluminum stearate has a melting point 118°C. and is water-insoluble. In summary, sodium stearate is water soluble and in a concentrations of 5 – 10% by weight in water forms a solid gel whereas calcium stearate and magnesium stearate are water insoluble and in concentrations of 5 – 10% by weight in water do not form a gel. Therefore, the teaching in Kellner et al. that the sodium stearate and calcium stearate and magnesium stearate are equivalent gelling agents with water is **FALSE** and would not be believed by the ordinary person skilled in art.


JAMES HUGH McLAUGHLIN

Enc. Title page and pages 3-1 and 3-227 of CRC Handbook of Chemistry and Physics
Title page and pages 532 and 801 of The Condensed Chemical Dictionary

Sworn to and subscribed before me
this 17th day of December, 2003.


Notary Public

My Commission Expires: 9-30-07



The Condensed Chemical Dictionary

NINTH EDITION

Revised by

GESSNER G. HAWLEY

*Coeditor, Encyclopedia of Chemistry
Coauthor, Glossary of Chemical Terms*

RoF. 147
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(1977)



VAN NOSTRAND REINHOLD COMPANY

NEW YORK CINCINNATI ATLANTA DALLAS SAN FRANCISCO
LONDON TORONTO MELBOURNE

varnishes, and paper (filler); animal and vegetable oils (bleaching agent); odor absorbent; filter medium; catalyst and catalyst carrier; anticaking agent in foods. See also asbestos.

magnesium silicofluoride. See magnesium fluosilicate.

magnesium stannate $\text{MgSnO}_3 \cdot 3\text{H}_2\text{O}$.

Properties: White crystalline powder. Soluble in water. Approximate temperature of decomposition 340°C .

Hazard: Toxic by inhalation. Tolerance, 2 mg per cubic meter of air.

Use: Additive in ceramic capacitors.

magnesium stearate $\text{Mg}(\text{C}_{17}\text{H}_{35}\text{O}_2)_2$, or with one H_2O . Technical grade contains small amounts of the oleate and 7% magnesium oxide MgO .

Properties: Soft white light powder; sp. gr. 1.028; m.p. 88.5°C (pure), 132°C (technical); tasteless; odorless. Insoluble in water and alcohol. Nontoxic. Nonflammable.

Grades: Technical; U.S.P.; F.C.C.

Containers: Fiber cans; multiwall paper sacks.

Uses: Dusting powder; lubricant in making tablets; drier in paints and varnishes; flattening agent; in medicines; stabilizer and lubricant for plastics; emulsifying agent in cosmetics; in foods as anticaking agent, binder, emulsifier.

magnesium sulfate (a) MgSO_4 ; (b) (epsom salts) $\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$.

Properties: Colorless crystals; saline, bitter taste; neutral to litmus; sp. gr. (a) 2.65; (b) 1.678; (a) decomposes 1124°C ; (b) loses $6\text{H}_2\text{O}$ at 150°C ; $7\text{H}_2\text{O}$ at 200°C ; soluble in glycerol; very soluble in water; sparingly soluble in alcohol. Low toxicity. Noncombustible.

Derivation: (a, b) Action of sulfuric acid on magnesium oxide, hydroxide or carbonate; (b) mined in a high degree of purity.

Grades: Technical; C.P.; U.S.P.; F.C.C.

Uses: Fireproofing; textiles (warp-sizing and loading cotton goods, weighting silk, dyeing and calico printing); mineral waters; catalyst carrier; ceramics; fertilizers; paper (sizing); cosmetic lotions; dietary supplement; medicine (antidote).

magnesium sulfide MgS .

Properties: Red brown crystalline solid; sp. gr. 2.84; decomposes above 2000°C . Decomposes in water. Low toxicity.

Uses: Source of hydrogen sulfide; laboratory reagent.

magnesium sulfite $\text{MgSO}_3 \cdot 6\text{H}_2\text{O}$.

Properties: White, crystalline powder; slightly soluble in water; insoluble in alcohol. Sp. gr. 1.725; m.p., loses $6\text{H}_2\text{O}$ at 200°C ; b.p., decomposes. Low toxicity.

Derivation: Action of sulfurous acid on magnesium hydroxide.

Uses: Medicine; paper pulp.

magnesium tetrahydrogen phosphate. See magnesium phosphate, monobasic.

magnesium thiosulfate (magnesium hyposulfite) $\text{MgS}_2\text{O}_3 \cdot 6\text{H}_2\text{O}$.

Properties: Colorless crystals; soluble in water; insoluble in alcohol. Sp. gr. 1.818; loses $3\text{H}_2\text{O}$ at 170°C .

Use: Medicine.

magnesium titanate Mg_2TiO_4 . Used in electronics.

magnesium trisilicate. U.S.P. specifies not less than 20% MgO and 45% SiO_2 ; similar to the F.C.C. requirements under magnesium silicate. See also talc.

Properties: Fine, white, odorless, tasteless powder; free from grittiness. Insoluble in water and alcohol; readily decomposed by mineral acids. Noncombustible.

Derivation: By reaction of soluble magnesium salts with soluble silicates.

Grades: Technical; U.S.P.

Uses: Industrial odor absorbent; decolorizing agent; antioxidant; medicine.

magnesium tungstate (magnesium wolframate)

MgWO_4 .

Properties: White crystals; sp. gr. 5.66; soluble in acids; insoluble in water and alcohol. Low toxicity. Noncombustible.

Derivation: Interaction of solutions of magnesium sulfate and ammonium tungstate.

Uses: Fluorescent screens for x-rays; luminescent paint.

magnesium zirconate $\text{MgO} \cdot \text{ZrO}_2$.

Properties: Powder; sp. gr. 4.23; m.p. 2060°C .

Use: Electronics.

magnesium zirconium silicate MgZrSiO_4 , or $\text{MgO} \cdot \text{ZrO}_2 \cdot \text{SiO}_2$.

Properties: White solid; m.p. 1760°C ; density 80 lb/cu ft; insoluble in water; alkalies; slightly soluble in acids. Noncombustible.

Containers: 80-lb paper bags; 500-lb drums.

Uses: Electrical resistor ceramics; glaze opacifier.

"Magnesol."™ Trademark for a synthetic adsorptive magnesium silicate.

Uses: Solvent purification, clarification and recovery; oil refining; deodorizing and decolorizing of oils and fats.

magnetic separation. Removal of bits of iron and other tramp metal from a material as it passes to a screen or classifying device by means of a magnet placed close to the stream of particles.

magnetite (lodestone; iron ore, magnetic) Fe_3O_4 , often with titanium or magnesium. A component of taconite (q.v.).

Properties: Black mineral; black streak; submetallic, or dull to metallic luster. Contains 72.4% iron. Readily recognized by strong attraction by magnet. Soluble in powder form in hydrochloric acid. Decomposes at 1538°C to ferric oxide Fe_2O_3 . Sp. gr. 4.9–5.2; hardness 5.5–6.5.

See also iron oxide, black.

magnetochemistry. A subdivision of chemistry concerned with the effect of magnetic fields on chemical compounds; analysis and measurement of these effects (e.g., magnetic moment and magnetic susceptibility) are important tools in crystallographic research and determination of molecular structures. Substances that are repelled by a magnetic field are diamagnetic (water, benzene); those that are attracted are paramagnetic (oxygen, transition element compounds). Diamagnetic materials have only induced magnetic moment; paramagnetic materials have permanent magnetic moment. Magnetochemistry has been useful in detection of free radicals, elucidation of molecular configurations of highly complex compounds, and in its application to catalytic and chemisorption phenomena. See also nuclear magnetic resonance.

magnetohydrodynamics (MHD). The behavior of high-temperature ionized gases passed through a magnetic field. A power-generating method using MHD involves an open cycle in which hot combustion gases

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Hazard: Se

malathion.
yl)ethyl (C
(CH_3O),P
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gr. 1.2315
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ganic solv
tible.

Purity: Tec
Derivation:
thiophosph
Hazard: To
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Use: Insect
Note: Appr
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maleic acid (i
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Properties:
taste; faint

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plants.

water; insol-

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(as Se), 0.2

bacteriology;
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stals; sp. gr.
water. Less
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(q.v.).

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food additive.

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rucks; carlots,

and detergents;
minating paper
bleaching and
treatment; soil

solidification; glass foam; pigments; drilling fluids;
binder for foundry cores and molds; waterproofing
mortars and cements; impregnating wood.

sodium silicoaluminate. See sodium aluminosilicate.

sodium silicofluoride. See sodium fluorosilicate.

sodium silico-12-molybdate. See sodium 12-molybdo-
silicate.

sodium 12-silicotungstate. See sodium 12-tungstosili-
cate.

sodium silver chloride. See silver sodium chloride.

sodium silver thiosulfate. See silver sodium thiosul-
fate.

sodium alpha-sodioacetate. See alpha-sodiosodium ace-
tate.

sodium sorbate CH₃CH:CHCH:CHCOONa. Com-
bustible. Nontoxic.
Uses: Food preservative.

sodium stannate Na₂SnO₃ · 3H₂O, or Na₂Sn(OH)₆.
Properties: White to light tan crystals; soluble in
water; insoluble in alcohol; decomposes in air. Aque-
ous solution slightly alkaline. Loses 3H₂O at 140°C.
Derivation: (a) By fusion of metastannic acid and so-
dium hydroxide. (b) By boiling tin scrap and sodium
plumbate solution.

Hazard: Toxic. Tolerance, 2 mg per cubic meter of
air.

Uses: Mordant in dyeing; ceramics; glass; source of
tin for electroplating and immersion plating; textile
fireproofing; stabilizer for hydrogen peroxide; blue-
print paper; laboratory reagent.

sodium stearate NaOOC(C₁₇H₃₅).

Properties: White powder with fatty odor. Soluble in
hot water and hot alcohol; slowly soluble in cold
water and cold alcohol; insoluble in many organic
solvents.

Impurities: Varying quantities of sodium palmitate.

Grade: Technical.

Containers: 150-lb drums; 200-lb barrels.

Uses: Waterproofing and gelling agent; toothpaste
and cosmetics; stabilizer in plastics.

sodium stearoyl 2-lactylate.

Properties: White powder. Melting range 46-52°C.
Nontoxic.

Derivation: Sodium salt of reaction product of lactic
and stearic acids.

Uses: Emulsifier; dough conditioner; whipping agent
in baked products, desserts, and mixes; complexing
agent for starches and proteins.

sodium styrenesulfonate CH₂:CH₂C₆H₄SO₃Na. White,
free-flowing powder.

Use: Reactive monomer. See sodium polystyrenesul-
fonate.

sodium subsulfite. See sodium thiosulfate.

sodium succinate Na₂C₄H₄O₆ · 6H₂O.

Properties: White crystals or odorless granules; solu-
ble in water. Loses 6H₂O at 120°C.

Use: Medicine.

sodium sulfate, anhydrous Na₂SO₄. See also salt cake.
Properties: White crystals or powder; odorless; bitter
saline taste; sp. gr. 2.671; m.p. 888°C; soluble in
water and glycerol; insoluble in alcohol. Noncom-
bustible; nontoxic.

Derivation: (a) By-product of hydrochloric acid pro-
duction from salt and sulfuric acid. (b) Purification
of natural sodium sulfate from deposits or brines.
(c) By-product of phenol manufacture (caustic fusion
process); (d) Hargreaves process (q.v.).

Grades: Technical; C.P.; detergent; rayon; glass mak-
ers.

Containers: Bags; drums.

Uses: Manufacture of kraft paper, paperboard, and
glass; filler in synthetic detergents; sodium salts; ce-
ramic glazes; processing textile fibers; dyes; tanning;
glass; pharmaceuticals; freezing mixtures; laboratory
reagent; food additive.

sodium sulfate decahydrate (sodium sulfate, crystals;
Glauber's salt) Na₂SO₄ · 10H₂O.

Properties: Large transparent crystals, small needles,
or granular powder; sp. gr. 1.464 (crystals); m.p.
33°C (liquefies); loses water of hydration at 100°C.
Soluble in water and glycerin; insoluble in alcohol;
solutions neutral to litmus. Nontoxic; nonflammable.

Derivation: Crystallization of sodium sulfate from
water solutions. (Glauber's salt); also occurs in na-
ture as mirabilite (q.v.).

Grades: Technical; N.F.

Uses: See under anhydrous form.

sodium sulfhydrate. See sodium hydrosulfide.

sodium sulfide (a) Na₂S; (b) Na₂S · 9H₂O.

Properties: Yellow or brick red lumps or flakes or
deliquescent crystals; (a) sp. gr. 1.856 (14°C); m.p.
1180°C; (b) sp. gr. 1.427 (16°C); decomposes at
920°C. Soluble in water; slightly soluble in alcohol;
insoluble in ether; largely hydrolyzed to sodium acid
sulfide and sodium hydroxide.

Derivation: By heating sodium acid sulfate with salt
and coal to above 950°C, extraction with water, and
crystallization.

Grades: Flake; fused; chip sulfide (60% Na₂S). 60%
fused and broken; 30% crystals; liquid.

Containers: Barrels; drums; bulk.

Hazard: Flammable, dangerous fire risk. Strong irri-
tant to skin and tissue. Liberates toxic hydrogen
sulfide on contact with acids.

Uses: Organic chemicals; dyes (sulfur); intermediates;
rayon (denitrating); leather (depilatory); paper pulp;
solvent for gold in hydrometallurgy of gold ores;
sulfiding oxidized lead and copper ores preparatory
to flotation; sheep dips; photographic reagent; en-
graving and lithography; analytical reagent.

Shipping regulations: (Rail) Yellow label. (Air) Flam-
mable Solid label.

sodium sulfite (a) Na₂SO₃; (b) Na₂SO₃ · 7H₂O.

Properties: White crystals or powder; saline, sulfurous
taste. Soluble in water; sparingly soluble in alcohol.
Sp. gr.: (a) 2.633; (b) 1.5939. M.p.: (a) decomposes;
(b) loses 7H₂O at 150°C.

Derivation: (a) Sulfur dioxide is reacted with soda
ash and water, and a solution of the resulting so-
dium bisulfite is treated with additional soda ash;
(b) by-product of the caustic fusion process for
phenol.

Grades: Reagent; technical; F.C.C.

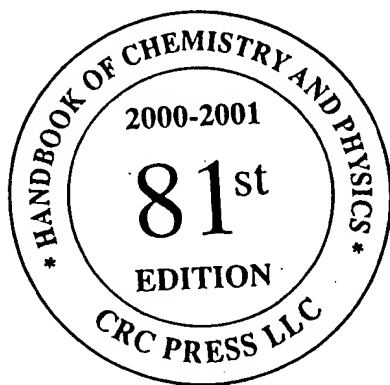
Containers: Bags; drums.

Hazard: Use prohibited in meats and other sources of
Vitamin B₁₂.

Uses: Paper industry (semichemical pulp); water
treatment; photographic developer; food preserva-
tive and antioxidant; textile bleaching (antichlor);
dietary supplements.

CRC Handbook of Chemistry and Physics

A Ready-Reference Book of Chemical and Physical Data



Editor-in-Chief

David R. Lide, Ph.D.

Former Director, Standard Reference Data
National Institute of Standards and Technology



CRC Press

Boca Raton London New York Washington, D.C.

179 8275

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PHYSICAL CONSTANTS OF ORGANIC COMPOUNDS

The basic physical constants for over 12,000 organic compounds are presented in this table, along with structures and references to other sources of information. An effort has been made to include the compounds most frequently encountered in the laboratory, the workplace, and the environment. The selection was based mainly on the appearance of the compounds in various specialized tables in this *Handbook* and in other widely used reference sources, such as the *Merck Index* and the *DIPPR Database of Pure Compound Properties*. The occurrence of a compound on regulatory lists of hazardous chemicals was also taken into consideration, as was the availability of reliable physical constant data. Clearly, criteria of this type are somewhat subjective, and compounds considered important by some users have undoubtedly been omitted. Suggestions for additional compounds or other improvements are welcomed.

The data in the table have been taken from many sources, including both compilations and the primary literature. Where conflicts were found, the value deemed most reliable was chosen. Some of the useful compilations of physical property data are listed at the end of this introduction.

The table is arranged alphabetically by the primary name, which is generally the Index Name from the 8th or 9th Collective Index of Chemical Abstracts Service (CAS). In a few cases, especially pesticides and pharmaceuticals, the common name is used rather than the more complex systematic name. By convention, CAS Index Names are written in inverted order, e.g., chloromethane is listed as methane, chloro and ethyl acetate as acetic acid, ethyl ester. Furthermore, certain important compounds are listed under Index Names which differ from the names by which they are commonly known (e.g. aniline appears as benzenamine and acetone as 2-propanone). In order to facilitate the location of compounds in the table, three indexes are provided:

- **Synonym Index:** Includes common synonyms, but not the primary name by which the table is arranged.
- **Molecular Formula Index:** Lists compounds by molecular formula in the Hill order (see Preface to this *Handbook*).
- **CAS Registry Number Index:** Lists compounds by Chemical Abstracts Service Registry Number.

Two lines of data appear for each compound. The explanation of the data fields follows.

Top Line:

- **No.:** An identification number used in the indexes and to identify the structure diagrams.
- **Name:** Primary name, generally the CAS Index Name.
- **Mol. Form.:** The molecular formula written in the Hill convention.
- **CAS RN:** The Chemical Abstracts Service Registry Number assigned by CAS as a unique identifier for the compound.
- **Merck No:** Monograph Number in *The Merck Index, Eleventh Edition*. It should be noted that this is not a unique identifier for a single compound, since several derivatives or isomers of a compound may be included in the same Monograph.
- **Bell. Ref:** Citation to the *Beilstein Handbook of Organic Chemistry*. An entry of 5-18-11-01234, for example, indicates that the compound may be found in the 5th Series, Volume 18, Subvolume 11, page 1234.
- **Solubility:** Solubility in common solvents on a relative scale: 1 = insoluble; 2 = slightly soluble; 3 = soluble; 4 = very soluble; 5 = miscible; 6 = decomposes. See List of Abbreviations for the solvent abbreviations.

Bottom line:

- **Synonym:** A synonym in common use. When the primary name is non-systematic, the systematic name appears here.
- **Mol. Wt.:** Molecular weight (relative molar mass) as calculated with the 1991 IUPAC Standard Atomic Weights.
- **mp/°C:** Normal melting point in °C. Although some values are quoted to 0.1°C, uncertainties are typically several degrees Celsius. A value is sometimes followed by "dec", indicating decomposition is observed at the stated temperature (so that it is probably not a true melting point). See the List of Abbreviations for other abbreviations.
- **bp/°C:** Boiling point in °C. When available, the normal boiling point is given first, without a superscript. This is the temperature at which the liquid phase is in equilibrium with the vapor at a pressure of 760 mmHg (101.325 kPa). Boiling point values at reduced pressure are also given in many cases; here the superscript indicates the pressure in mmHg. A "dec" or "exp" following the value indicates decomposition or explosion has been observed at the boiling point. A simple entry of "exp" (sometimes followed by a temperature) indicates explosion may occur on heating, even below the boiling point. An entry of "sub" indicates that no boiling point is available, but measurable vapor (sublimation) pressure has been observed upon heating the solid. A temperature may be given, but no precise meaning can be attached because the pressure is not specified.
- **den/g cm⁻³:** density (mass per unit volume) in g/cm³. The superscript indicates the temperature in °C. Values are given only for the liquid and solid phases, and all values are true densities, not specific gravities. The number of decimal places gives a rough estimate of the accuracy of the value.
- **n_D:** Refractive index, at the temperature indicated by the superscript. Unless otherwise indicated, all values refer to a wavelength of 589 nm (sodium D line). Values are given only for liquids and solids.

Structures are given, when available, in the section following the main table, using the No. in the first column as the linking identifier.

PHYSICAL CONSTANTS OF ORGANIC COMPOUNDS (continued)

Nd.	Name Synonym	Mol. Form. Mol. Wt.	CAS RN mp/°C	Merck No. bp/°C	Bell. Ref. den/g cm ⁻³	Solubility n _D
8238	Octadecanedioic acid, diethyl ester	C ₂₂ H ₄₂ O ₄ 370.57	1472-90-8 54.5	240 ¹²	4-02-00-02176	eth 4; EtOH 4
8239	Octadecanedioic acid, 9,10-dihydroxy-, (R*,R*)-(±)- Phthalonic acid	C ₁₈ H ₃₄ O ₆ 348.48	23843-52-9 128	7297	4-03-00-01250	
8240	Octadecane, 1-(ethenoxy)-	C ₂₀ H ₄₀ O 286.54	930-02-9 30	182 ³	4-01-00-02057 0.8138 ¹⁰	chl 2
8241	Octadecane, 3-ethyl-5-(2-ethylbutyl)-	C ₂₈ H ₅₄ 368.71	55282-12-7	229.5 ¹⁰	4-01-00-00588 0.8115 ²⁰	1.45239 ²⁰
8242	Octadecane, 1-iodo-	C ₁₈ H ₃₇ I 380.40	629-93-8 34	383	4-01-00-00556 1.0994 ²⁰	H ₂ O 1; EtOH 2; eth 2 1.4810 ²⁰
8243	Octadecanenitrile	C ₁₈ H ₃₅ N 265.48	638-65-3 41	362	4-02-00-01242 0.8325 ²⁰	H ₂ O 1; EtOH 3; eth 4; ace 4 1.4389 ⁴⁵
8244	1-Octadecanethiol Stearyl mercaptan	C ₁₈ H ₃₈ S 286.57	2885-00-9 30	204-10 ¹¹	4-01-00-01894 0.8475 ²⁰	eth 4 1.4645 ²⁰
8245	Octadecane, 9-p-tolyl- Toluene, p-(1-octyldecyl)-	C ₂₅ H ₄₄ 344.62	4445-08-3	185 ¹⁰	4-05-00-01221 0.8549 ²⁰	1.4811 ²⁰
8246	9,11,13-Octadecatrienoic acid (Z,Z,Z) Eleostearic acid	C ₁₈ H ₃₀ O ₂ 278.44	3884-88-8 48.5			
8247	Octadecanoic acid Stearic acid	C ₁₈ H ₃₆ O ₂ 284.48	57-11-4 88.8	8761 350 dec; 232 ¹⁵	4-02-00-01208 0.9408 ²⁰	H ₂ O 1; EtOH 2; eth 4; ace 3 1.4269 ⁸⁰
8248	Octadecanoic acid, aluminum salt	C ₅₄ H ₁₀₅ AlO ₉ 877.41	837-12-7 118	370	4-02-00-01208	H ₂ O 1; EtOH 3; peth 3
8249	Octadecanoic acid, anhydride	C ₃₆ H ₇₀ O ₃ 550.95	638-08-4 72		4-02-00-01239 0.8365 ⁸²	H ₂ O 1; EtOH 1; eth 2; bz 2 1.4362 ⁸⁰
8250	Octadecanoic acid, 18-bromo- Stearic acid, 18-bromo	C ₁₈ H ₃₅ BrO ₂ 363.38	2538-38-1 75.5	240 ⁴	2-02-00-00361	bz 4; eth 4; EtOH 4
8251	Octadecanoic acid, butyl ester Butyl stearate	C ₂₂ H ₄₄ O ₂ 340.59	123-95-5 27	1589 343	4-02-00-01218 0.854 ²⁵	H ₂ O 1; EtOH 3; ace 4 1.4328 ⁸⁰
8252	Octadecanoic acid, calcium salt	C ₃₆ H ₇₀ CaO ₄ 607.03	1592-23-0 179.5	1710	4-02-00-01208	H ₂ O 1; EtOH 1; eth 1
8253	Octadecanoic acid, cyclohexyl ester Stearic acid, cyclohexyl ester	C ₂₄ H ₄₆ O ₂ 366.63	104-07-4 44		4-08-00-00038 0.889 ¹⁵	eth 4
8254	Octadecanoic acid, 9,10-dihydroxy- 9,10-Dihydroxystearic acid	C ₁₈ H ₃₆ O ₄ 318.48	120-87-8 90	3171	4-03-00-01092	H ₂ O 1; EtOH 2; eth 2
8255	Octadecanoic acid, 2,3-dihydroxypropyl ester, (±)-	C ₂₁ H ₄₂ O ₄ 358.58	22810-63-5 74		4-02-00-01225 0.9841 ²⁰	H ₂ O 1; EtOH 2; eth 2; lig 3 1.4400 ⁸⁸
8256	Octadecanoic acid, 1,2-ethanediyl ester	C ₃₈ H ₇₄ O ₄ 595.00	627-83-8 79	241 ²⁰	4-02-00-01223 0.8581 ⁷⁸	H ₂ O 1; EtOH 1; eth 4; ace 4
8257	Octadecanoic acid, ethyl ester	C ₂₀ H ₄₀ O ₂ 312.54	111-61-5 33	199 ¹⁰	4-02-00-01218 1.057 ²⁰	H ₂ O 1; EtOH 3; eth 3; ace 4 1.4349 ⁸⁰
8258	Octadecanoic acid, hexadecyl ester	C ₃₄ H ₆₈ O ₂ 508.81	1190-83-2 57		4-02-00-01220	ace 4; eth 4; chl 4 1.4410 ⁷⁰
8259	Octadecanoic acid, 2-[2-(2-hydroxyethoxy)ethoxy]ethyl ester	C ₂₆ H ₅₂ O ₆ 480.70	108-07-0 40	328	1.1285 ¹⁵	1.4593 ²⁰
8260	Octadecanoic acid, 2-hydroxyethyl ester	C ₂₀ H ₄₀ O ₃ 328.54	111-60-4 60.5	189-91 ³	4-02-00-01222 0.8780 ⁸⁰	EtOH 2; eth 3 1.4310 ⁸⁰
8261	Octadecanoic acid, lead (II) salt Lead stearate	C ₃₆ H ₇₀ PbO ₄ 774.15	7428-48-0 125		4-02-00-01208 1.4	H ₂ O 1; Hot EtOH 3; eth 1
8262	Octadecanoic acid, 14-methyl- Stearic acid, 14-methyl	C ₁₉ H ₃₈ O ₂ 298.51	94434-84-7 37.5	182 ^{0.4}	4-02-00-01285 0.9400 ²⁰	
8263	Octadecanoic acid, 17-methyl-	C ₁₉ H ₃₈ O ₂ 298.51	2724-59-8 67.5	180 ^{0.3}	4-02-00-01260 0.8420 ⁷⁰	1.4336 ⁷⁰
8264	Octadecanoic acid, 9-methyl- Stearic acid, 9-methyl	C ₁₉ H ₃₈ O ₂ 298.51	88073-38-3 40	171 ^{0.1}	4-02-00-01271 0.8980 ²⁰	
8265	Octadecanoic acid, 3-methylbutyl ester Stearic acid, isopentyl ester	C ₂₃ H ₄₆ O ₂ 354.62	627-88-3 25.5	192 ²	2-02-00-00353 0.855 ²⁰	H ₂ O 1; EtOH 2; eth 3; ace 3 1.4335 ⁵⁰
8266	Octadecanoic acid, methyl ester	C ₁₉ H ₃₈ O ₂ 298.51	112-61-8 39.1	443; 215 ¹⁵	4-02-00-01218 0.8498 ⁴⁰	eth 4; chl 4 1.4367 ⁴⁰
8267	Octadecanoic acid, 1-methylethyl ester	C ₂₁ H ₄₂ O ₂ 326.58	112-10-7 28	207 ⁸	4-02-00-01219 0.8403 ³⁸	ace 4; eth 4; EtOH 4; chl 4
8268	Octadecanoic acid, 2-methylpropyl ester Isobutyl stearate	C ₂₃ H ₄₆ O ₂ 340.59	646-13-9 28.9	5034 223 ¹⁵	3-02-00-01017 0.8498 ²⁰	eth 4
8269	Octadecanoic acid, 12-oxo-, ethyl ester Stearic acid, 12-oxo, ethyl ester	C ₂₀ H ₃₈ O ₃ 328.52	88472-81-1 38	199 ³	3-03-00-01294	EtOH 4
8270	Octadecanoic acid, pentyl ester Stearic acid, pentyl ester	C ₂₃ H ₄₆ O ₂ 354.62	6382-13-4 30		4-02-00-01220	eth 4; EtOH 4 1.4342 ⁵⁰
8271	Octadecanoic acid, phenyl ester Stearic acid, phenyl ester	C ₂₄ H ₄₀ O ₂ 360.58	837-55-8 52	267 ¹⁵	4-08-00-00818	H ₂ O 1; EtOH 3; eth 3
8272	Octadecanoic acid, 1,2,3-propanetriyl ester Tristearin	C ₅₇ H ₁₁₀ O ₆ 891.50	555-43-1	9669	4-02-00-01233 0.8559 ⁹⁰	H ₂ O 1; EtOH 1; ace 3; bz 2 1.4395 ⁸⁰
8273	Octadecanoic acid, propyl ester	C ₂₁ H ₄₂ O ₂ 326.58	3834-92-2 28.9	188.8 ²	4-02-00-01219 0.8452 ³⁸	ace 4; eth 4; EtOH 4 1.4400 ⁵⁰
8274	Octadecanoic acid, 9,10,12,13-tetrabromo-, methyl ester Stearic acid, 9,10,12,13-tetrabromo, methyl ester	C ₁₈ H ₃₄ Br ₄ O ₂ 614.09	82080-88-8 83	215 ¹⁵	3-02-00-01049	eth 4; EtOH 4; chl 4 1.4346 ⁴⁵